

## **Exhibit D**



## **Service Level Agreement**



## 1. Introduction

This Service Level Agreement (SLA) is made and entered into on \_\_\_\_\_, 2006 between the City of Wichita, KS, (City of Wichita) Unified School District No 259 (USD 259), Sedgwick County, KS, (Sedgwick County) and Westar Energy, Inc.

The Wichita Wireless Network Consortium (WWNC) is an association of members consisting of the City of Wichita, USD 259, Sedgwick County and Westar Energy, Inc., that was formed to create and jointly use a Wireless Data Network (WDN) and an Automated Vehicle Location (AVL) system. This consortium operates under the auspices of a Memorandum of Understanding (MOU) and Inter-local Cooperative Agreement (ICA) made between these parties on \_\_\_\_\_, 2006.

## 2. Purpose

This agreement is intended to create a clear understanding of how the WDN and AVL system will be managed, maintained and supported as well as what each WWNC member's expectations and requirements are of these systems and capabilities.

## 3. Customers

City of Wichita  
Sedgwick County  
USD 259  
Westar Energy, Inc.

## 4. Service Locations

### a. AVL System Infrastructure and Wireless Data Network Operations Center:

ID	Site	Address	Owner
	City Hall	455 N. Main St.	City of Wichita

### b. WDN Backbone Sites:

ID	Site	Address	Owner
BB1	City Hall	455 N. Main St.	City of Wichita
BB2	McLean Tower	2277 N. Marigold	USD 259
BB3	Chisholm Trail Tower	6001 N. Forester	USD 259
BB5	Woodlawn Water Tower	1905 N Woodlawn	City of Wichita
BB6	Bostic Tower	8103 E. Gilbert	USD 259
BB7	AT&T Tower		AT&T
BB8	South High Tower	701 W. 33rd S	USD 259
BB9	Northwest Tower	1220 N. Tyler	USD 259



**c. WDN Cell Extender Sites:**

<b>ID</b>	<b>Site</b>	<b>Address</b>	<b>Owner</b>
NE7	Fire Station #10	1755 N. Grove	City of Wichita
NE12	Northeast Substation	2911 E. 33rd N	City of Wichita
NE18	Edgemoor Park (N)	5815 E. 9th	City of Wichita
NW10	Career Development	444 E. William	City of Wichita
NW23	Filter Plant	1815 W. Pine	City of Wichita
NW30	Evergreen NCH	2700 N. Woodland	City of Wichita
NW50	Airport	2999 S. Airport Rd	City of Wichita
NW62	Evergreen Health	2700 N. Woodland	City of Wichita
SE4	Colvin NCH	2820 S. Roosevelt	City of Wichita
SE5	Colvin Health	2820 S. Roosevelt	City of Wichita
SW11	Public Works Admin	1144 S. Seneca	Sedgwick County
CX1	Kelly	3143 S. Millwood	USD 259
CX2	Southeast	903 S. Edgemoor	USD 259
CX3	Benton	338 S. Woodchuck Ln	USD 259
CX4	Hadley	1101 Dougherty	USD 259
CX5	Cleveland	3345 W. 33rd N	USD 259
CX6	Cessna	2101 W. 45th S	USD 259
CX7	White	5148 S. Kansas	USD 259
CX8	Earhart	4401 N. Arkansas	USD 259
CX9	Brooks	3802 E. 27th N	USD 259
CX10	Northeast	1847 N. Chautauqua	USD 259
CX11	Hamilton	1407 S. Broadway	USD 259
CX12	Mead	2601 E. Skinner	USD 259
CX13	Payne	1601 S. Edwards	USD 259
CX14	Webb Zone Water Tower	8778 E. 53rd N	City of Wichita
CX15	Siren 1	County	Sedgwick County
CX16	Siren 2	County	Sedgwick County
CX17	Siren 3	County	Sedgwick County
CX18	Siren 4	County	Sedgwick County
CX19	Siren 5	County	Sedgwick County

## **5. Agreement Definitions**

**a. Agreement Period:**

This agreement begins \_\_\_\_\_, and shall remain valid indefinitely, or as long as one or more of the Participants (City of Wichita, Sedgwick County, USD 259 and Westar Energy, Inc.) utilize the WDN.

**b. Agreement Maintenance:**

This agreement is the direct responsibility of the WWNC Network Manager (NM) (see section 7). Should this role change with respect to this product, he or she will transfer responsibility to the appropriate person or organization.



**c. Agreement Distribution:**

A copy of this document will be distributed to Participant contacts (see section 6b). The NM will retain the originals and be responsible for all official updates and redistribution to all appropriate parties.

**d. Agreement Changes:**

Changes to this agreement can be made only by vote of the WWNC Board as defined in the ICA.

## 6. Primary Contacts

**a. WWNC Network Manager:**

For the purpose of maintaining and providing support of the WDN and AVL system, the City shall act as the WWNC Operator. The NM shall be an employee of the City and shall be charged by the WWNC Board with providing all support, maintenance and project activities required to keep the WDN and AVL system in good working order.

Network Manager: 529-WWDNC (9962)

**b. Business Contacts:**

As the WDN and AVL system are part of the overall capability for which WWNC was formed, participants identified in this agreement will be notified with regard to establishment, change or termination of any services. In the event that the NM is not able to provide continuous service or meet the service reliability measures described within this document, it is the responsibility of the NM to contact the following WWNC members:

Contact	Organization	Telephone	Available
Kevin Norman	City of Wichita	(316) 268 - 4590	During Regular Business Hours
Richard Vogt	Sedgwick County	(316) 660 - 9851	During Regular Business Hours
Cathy Barbieri	USD 259	(316) 973 - 4210	During Regular Business Hours
Jon Wirtz	Westar Energy	(316) 261 - 6801	During Regular Business Hours

## 7. Scope

This SLA details the following:

- How the WDN and AVL system will be maintained, managed and supported and the roles of the NM and WWNC members;
- The rules that will govern access to facilities owned by each WWNC member;
- How the financial management of the WDN and AVL system will be managed.

**a. Role of the Network Manager:**

The NM refers not to an individual but to a service capability. As previously mentioned, the NM will be responsible with providing all support, maintenance and project activities required to keep the WDN and AVL system in good working order. The WDN and AVL system are really two separate but highly interrelated systems: 1) the components necessary for the Wireless Data Network; and 2) the AVL server and software necessary for each participant to have AVL tracking capabilities.



Both the WDN and the AVL system can be divided into 2 major areas: 1) the components needed to create the overall capability; and 2) the components needed for each WWNC member to connect to the WDN and utilize the AVL system. The NM has the primary responsibility and accountability for overall capability, while each WWNC member will take care of their own hardware, software and devices necessary to connect to the WDN and to use the AVL system. The NM will assist WWNC members as needed and as time permits in projects, support and consulting to use the WDN and AVL system, but always with the understanding that management and support of the overall capability shall take precedent over the needs or activities required by individual WWNC members for connecting to the WDN or using the AVL system.

For purpose of this service agreement, it is necessary to define what components make up overall WDN and AVL system capabilities and what activities the NM will do and which WWNC members will perform.

**b. Definition of WDN Capability:**

The overall WDN capability refers to all hardware, software and devices necessary to make the WDN work as an overall data network that allows individual sites, vehicles and devices to connect and transmit data over the WDN. This would include the components needed to allow each WWNC member to connect their respective networks to the WDN main network. These components consist of what are termed: 1) Backbone sites; 2) Cell Extender Sites; and 3) the Wireless Data Network Operations Center (WDNOC) as listed in previous text of this document.

The NM will have primary responsibility for care of the WDN components including hardware, software, firmware, mounting equipment at each of these sites. However, the sites themselves belong to individual WWNC members, and care and ownership of the facility portion of these sites (e.g. towers, buildings, etc.) remains with the owner of said site. The overall WDN ends at the point where a device plugs into an electrical socket.

Access to these sites by the NM or any vendor hired to assist with maintenance of the WDN or AVL system will be controlled by the rules and processes of the individual WWNC member as required by their respective organizations. This will include any security clearances, non-disclosure or access agreements, notifications, etc. The rules thereof for each WWNC member in this regard will be documented and submitted to the WWNC Board as part of the standard operating procedures for of the WDN.

**c. Definition of the AVL System Capability:**

The AVL system refers to the hardware and software needed to provide the server based AVL capability. This includes the ability to gather, store, display and distribute AVL information as received from vehicles over the WDN. This system will work in conjunction with some type of client software to allow individuals of each participant to display and interact with the AVL system.

**d. Services of the NM Overall:**

The NM will have primary responsibility for the following tasks needed to maintain and manage the WDN and AVL system.

While many of these tasks are technical in nature, others are administrative:

1. **Preventive Maintenance:**  
This entails coordination of all preventative maintenance, including device specific activities as well as any software or OS upgrades and patches required to keep the WDN and AVL system in good working order and secure;
2. **Problem Troubleshooting and Resolution:**  
Should an error or problem be encountered with the WDN or AVL system, the NM will investigate the issue and coordinate the resolution of the problem, whether via the NM's activities or a vendor/service provider;
3. **Vendor Coordination and Management:**  
The NM will be the contact for any vendors providing services or products for the benefit of the WDN and AVL system and will manage the overall vendor relationship on behalf of WWNC. This will include coordination and monitoring of vendor activities, monitoring of vendor service level agreements, tracking of contractual obligations and managing the WWNC-Vendor relationship. The NM will also maintain a list of relevant vendor contact information (i.e. address, telephone, email, etc.) for use by the WWNC members;
4. **System and Network Security Administration:**  
The NM will provide network and system level security including establishment, coordination, and documentation of all security policies and procedures, administration of these policies and procedures, monitoring of security aspects of the WDN and AVL systems, problem resolution regarding any issues that arise, and notification of issues and resolution to the appropriate WWNC participants should a security issue arise;
5. **Software Patches and Upgrades:**  
The NM will install all software patches (including Operating System patches) and upgrades needed to keep the WDN and AVL system in good working order and secure. The NM will distribute client software to WWNC members as required so that their respective clients can connect to and utilize the WDN and AVL system;
6. **System Backups and Disaster Recovery:**  
The NM will backup all necessary software and database components to insure continuity of service for the WDN and AVL system should a system failure occur requiring restoration of these components. The NM will also write and maintain documentation necessary to rebuild the system in the event of catastrophic failure;
7. **System Tuning and Optimization:**  
The NM will perform routine system tuning and optimization tasks as required to keep the WDN and AVL system in good working order;
8. **Performance Analysis and Capacity Planning:**  
The NM will monitor system and network utilization levels and provide regular reports to the WWNC Board. Further, the NM will review this information with the intent to provide planning for current and future capacity. Should it be necessary to increase the capacity of any aspect of the system, the NM will perform the capacity expansion planning or manage vendor activities, if necessary. The NM will then provide an analysis to the WWNC Board regarding the expansion including need, benefit, costs, and project timelines;
9. **Coordination of Training:**  
The NM will coordinate training for WWNC participants as required so that they can use the WDN and AVL system effectively. If possible, they will perform the training themselves, but otherwise will coordinate training from qualified vendors;

10. Standards and Policy Definition:

The NM will define and document standards and policies necessary to insure the effective and secure operation of the WDN and AVL system. The NM will present these standards and policies to the WWNC Board for approval and implementation;

11. Standard Operating Procedures (SOP):

The NM will create and document SOP for the WWNC members for tasks such as adding a device to the WDN, troubleshooting issues and problems, installing any client software, etc.;

12. Escalation Procedures and Contact Lists:

The NM will define and validate with the WWNC Board escalation procedures to be used in the event of system or network failure, planned or unplanned maintenance, and any other notifications as required by the WWNC Board. The NM will also document and keep current the contact information for each WWNC member to be used as part of these notification and escalation procedures;

13. Facility and Tower Access Procedures:

The NM will gather and keep current documentation from each WWNC member detailing their respective policies and requirements for access to tower and facility sites;

14. Change Management:

The NM will define all change management procedures and present them to the WWNC Board for approval. Further, the NM will facilitate and manage the defined processes and provide regular updates to the WWNC Board of past and planned changes to the WDN and AVL system;

15. Financial Management:

The NM will coordinate all financial matters pertaining to the WDN and AVL system, including preparing an annual budget, receiving, processing and paying all invoices, and providing monthly and annual financial reports to the WWNC Board of financial activities. All financial documents such as invoices, statements of work, etc. shall be scanned and made available to any WWNC member at their request;

16. Purchasing Agent:

The NM will act as a purchasing agent to purchase WDN and AVL system components on behalf of the WWNC members should they require such services;

17. Project Manager:

Should the WDN or AVL system require expansion or upgrade, the NM will act as project manager for these activities;

18. Spectrum Licensing:

The WDN will require licensing of specific segments of the wireless spectrum. The NM shall act as holder of these licensed portions on behalf of WWNC and will manage all activities required to hold these licenses necessary for the proper functioning of the WDN;

19. Work Order and Asset Information Database:

The NM will use a system to track asset information, work requests and trouble tickets;

20. Service Level Agreement:

The NM will document and keep current this SLA so that it remains a document that accurately reflects the service agreement between the WWNC members and approved by the WWNC Board. The WWNC Board will approve any and all changes to this SLA.



#### **e. Wireless Network Monitoring Services**

The WDN will be monitored for availability and error by a contracted company, selected by the WWNC Board. The NM will be the primary point of contact with this monitoring service entity and will manage the relationship with this vendor, including providing any reports and/or metrics of the network or the monitoring services back to the WWNC Board. The services provided by the network monitoring vendor will be detailed in the service contract of this vendor.

Should this monitoring service company detect a network fault or loss of connectivity, they will notify the NM and selected members of each WWNC member's staff. The NM will then work with the monitoring service, WWNC technical staff and any required vendors to determine what type of problem has occurred, and how best to correct the situation.

Any and all changes to the WDN will be communicated by the NM to the monitoring service company as contractually and operationally required.

## **8. Service Level Details**

Use of the Wireless Network makes the following assumptions:

- All equipment in use by any WWNC member meets the minimum standards recommended by the NM and approved by the WWNC Board;
- Installation of any client software or device is done by a qualified entity as approved by the WWNC Board;
- Access and User accounts with the appropriate permission levels are set up in accordance with standard operating procedures as approved by the WWNC Board.

#### **a. WDN and AVL System Availability:**

- |                          |     |
|--------------------------|-----|
| • Days of week:          | All |
| • Hours of Availability: | All |
| • Off hour Availability: | All |
| • Holiday Availability:  | All |

Note that System Availability is not guaranteed on a 24 x 7 basis even though it is generally available. Service may be disrupted for system maintenance as required to insure the health and operation of the WDN and AVL system. All planned maintenance will be performed within the maintenance windows per the standard operating procedures of the NM as approved by the WWNC Board. In the event of unplanned or emergency maintenance activities, advanced notice will be provided to each WWNC member contact if possible.

#### **b. Services Provided:**

- Assistance with general and agreed upon use of the wireless network;
- Assistance with general and agreed upon use of network hardware;
- Assistance with hardware configuration to attach to the wireless network;
- Assistance with AVL software and specialized hardware;
- Management of the wireless network and application administrative operations;
- AVL Server Backup and Disaster Recovery;
- Coordination of Client Hardware Moves, Adds or Changes;





- Coordination of scheduled hardware, software, OS, firmware and device maintenance;
- Network analysis for agreed upon implementations;
- Coordination and Management of Vendor, Reseller and Contract Services;
- Training in general use and administration of the WDN and AVL System as appropriate;
- Other services may be added as agreed upon by the WWNC Board.

**c. Excluded Services:**

- Changes to intended system functionality as approved by the WWNC Board;
- Administration or support of individual members hardware and/or software;
- Training in business processes;
- Consumable replacement;
- Client PC/laptop/workstation troubleshooting, maintenance and repairs.

**d. Primary Support Availability**

For assistance with the WDN or AVL System, WWNC member end users should first contact their own respective support organization. If the WWNC member's support organization is unable to resolve the problem, the NM will then be contacted for assistance.

For the purposes of contact with the NM, each WWNC Board member will designate a group of persons from their respective organization who are authorized to contact the NM for assistance. The NM will maintain this list on behalf of the WWNC Board.

**e. Service Contacts:**

Customers may contact the NM by emailing [WWDNCNM@wichita.gov](mailto:WWDNCNM@wichita.gov), or by calling 529-WWDNC (9962).

**f. Hours of Operation:**

8:00 a.m. to 5:00 p.m. Monday-Friday, except for all City observed holidays.

Calls logged before 4 pm will be considered for Same Business Day response.

**g. Problem Severity Levels**

Severity Level	Customer Impact	Response Time to Customer	Resolution Time	Resolution Time (calls after 4 pm)
1	Business halted	Immediate	Continuous Effort	Continuous Effort
2	Business impact - High	2 Business hours	6 Business hours	Next Business Day
3	Business impact - Low	Same Business Day	8 Business hours	Next Business Day
4	Upgrades & Inquiries	Same Business Day	4 Business Days	5 Business Days

*\* Response times are based on Business Hours of 8am to 5 pm weekdays and availability of parts*

*\*\*The NM will make every effort to handle ALL calls as they are received. However, calls that cannot be resolved on the first contact will be entered into the database for prioritization and completion based on Severity Level and Age of the call*

**h. Severity Level Definitions:**

1. **Business Halted** –Priority 1 descriptions include, but are not limited to:
  - One or more segments of the WDN are down or inaccessible to all mobile users;
  - A segment of the backhaul portion of the WDN is not working;
  - Connections from the WDN NOC to an individual WWNC main network is not working or experiencing significant packet loss;

- The AVL System is unavailable to all users;
  - Virus Alerts or possible infections of malicious code;
  - Security breaches.
2. **Business impact - High** – Priority 2 descriptions include, but are not limited to:
- A fixed location cannot connect to the WDN;
  - Multiple mobile users cannot access the WDN but the WDN is still generally available.
3. **Business impact – Low** – Priority 3 descriptions include, but are not limited to:
- Equipment or software encountered by single users or by multiple users if it does not prevent them from using the network or system.
4. **Upgrades & Inquiries** – Priority 4 descriptions include, but are not limited to:
- Projects, moves/adds/changes;
  - “How to” questions;
  - Training requests.
5. **Definitions:**
- **Response time to customer** – The time between the initial request and the NM’s first response.
  - **Resolution time** – The time between the first response to the customer and the actual resolution of the problem.
  - **Continuous Effort** means the NM will continue to manage the problem until resolved.
  - **Resolution** -- The user is fully functional on the network. This may involve a loaner piece of equipment or some other workaround.

**i. How a Call is Handled:**

- The WWNC end user should first call their network and system management personnel. After the WWNC support personnel have performed trouble shooting per the Standard Operating Procedures if the problem has not been resolved, they will then contact the NM.
- In cases where the problem needs further research, the call will be assigned a ticket reference number and the call will be returned once the researched has been completed.
- To assure problems are resolved within a reasonable timeframe, all calls receive a priority rating as they are entered into the database. This is to assure accountability, work prioritization and quick resolution to the problem.

**j. Notification & Escalation:**

All calls and emails to the NM will be automatically logged into a call tracking system that has all information for when they are received.

The importance of calls can be subjective and many factors go into prioritizing them. As a guideline, however, the NM will proactively escalate calls based on the codes in the Severity table, and inform increasingly higher levels of management when they remain unresolved.

The WWNC Board will receive a monthly summary of all open and closed calls for the previous month.



**k. Service Performance Measures:**

Important to the process is to measure the actual performance against the service level agreement. As the staffing philosophy is not to staff for peaks in the workload, there will be times when the NM is unable to meet the agreement.

The NM will define appropriate service performance measures to be approved by the WWNC Board. The NM will report these performance measures to the WWNC Board as required.

The current Service Performance Measures are as follows:

- **Problem management** – 90% resolved within severity level definition;
- **Follow-up calls** – All calls & e-mails logged before 4:00 pm will be returned within the same business day;
- **Calls directed to the on-hold message** – All calls directed to the on-hold message will be answered in ten minutes or less.

**l. After Hours Support Availability:**

For assistance with the WDN or AVL, WWNC end users should first contact their respective support organization. If the normal support organization is unable to resolve the problem, they will then contact the Network Manager for assistance.

**m. Service Contacts:**

Customers may contact the NM by calling 529-WWDNC (9962). This will be directed to a pager, and calls to this pager will be returned within 15 minutes.

**n. Hours of Operation:**

Any time outside of Primary support availability.

**o. Services Provided:**

Only problem that are of Severity Level 1 (Business Halted) will be addressed in off hours. All other calls will be handled as a call received after 4 p.m. per previous support level definitions.